L2 ANSWER 1 OF 1 MEDLINE on STN
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TI Inhibition of mast cell tryptase by inhaled APC 366 attenuates allergen-induced late-phase airway obstruction in **asthma**.
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FS Abridged Index Medicus Journals; Priority Journals
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AB BACKGROUND: APC 366, a selective **inhibitor** of **mast cell tryptase**, has been shown to inhibit antigen-induced early asthmatic response (EAR), late asthmatic response (LAR), and bronchial hyperresponsiveness (BHR) in a sheep model of allergic **asthma**. OBJECTIVE: The purpose of this study was to investigate the effects of APC 366 on antigen-induced EAR, LAR, and BHR in mild atopic asthmatics not on any anti-inflammatory therapy. METHODS: Sixteen mild atopic asthmatics, each with a demonstrable antigen-induced EAR, LAR, and BHR to histamine, were recruited into this randomized, double-blinded, crossover study. APC 366 (5 mg)/placebo was administered by aerosol inhalation 3 times per day on treatment days 1 through 4. Allergen challenge was carried out on day 4. Histamine challenge was performed the following morning, 1 hour after final dosing. RESULTS: Subjects were shown to have a significantly smaller overall mean area under the curve for the LAR (P =.012) and mean maximum fall in FEV(1) for the LAR (P =.007) after pretreatment with APC 366 in comparison with placebo. No significant effects on BHR were demonstrable. Although the EAR was reduced by 18% after treatment with APC 366 in comparison with placebo, this was not statistically significant. CONCLUSION: Short-term repeated administration of APC 366 significantly reduced the magnitude of antigen-induced LAR in atopic asthmatics, which supports the role of mast cell tryptase in the pathophysiology of the LAR.
CT Check Tags: Female; Male
Administration, Inhalation
Adult
*Allergens: IM, immunology
***Asthma: DT, drug therapy**
***Asthma: EN, enzymology**
***Asthma: PP, physiopathology**
Bronchial Hyperreactivity: DT, drug therapy
Bronchial Hyperreactivity: EN, enzymology
Bronchial Hyperreactivity: PP, physiopathology
Cross-Over Studies
*Dipeptides: AD, administration & dosage
Dipeptides: TU, therapeutic use
Double-Blind Method
Humans
*Mast Cells: EN, enzymology
Mast Cells: IM, immunology
Research Support, Non-U.S. Gov't
*Serine Endopeptidases: ME, metabolism
*Serine Proteinase Inhibitors: AD, administration & dosage

Serine Proteinase Inhibitors: TU, therapeutic use

CN 0 (Allergens); 0 (Dipeptides); 0 (N-(1-hydroxy-2-naphthoyl)arginyl-prolinamide); 0 (Serine Proteinase Inhibitors); EC 3.4.21 (Serine Endopeptidases); EC 3.4.21.59 (tryptase)